STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/821,231 A

Source: IFWO

Date Processed by STIC: 2-4-05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.2.2 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
> http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission User Manual - cPAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building. 401 Dulany Street. Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/821,231A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ___ Wrapped Nucleics
Wrapped Aminos

The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .5; this will prevent "wrapping."

2 ___ Invalid Line Length   The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 ___ Misaligned Amino
Numbering

The numbering under each 5ᵗʰ amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 ___ Non-ASCII

The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5 ___ Variable Length

Sequence(s) ___ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing

6 ___ PatentIn 2.0
"bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) ___. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7 ___ Skipped Sequences
(OLD RULES)

Sequence(s) ___ missing. If intentional, please insert the following lines for each skipped sequence
(2) INFORMATION FOR SEQ ID NO X (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION SEQ ID NO X (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES" response to include the skipped sequences.

8 ___ Skipped Sequences
(NEW RULES)

Sequence(s) ___ missing. If intentional, please insert the following lines for each skipped sequence
<210> sequence id number
<400> sequence id number
000

9 ___ Use of n's or Xaa's
(NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing
Per 1.823 of Sequence Rules, use of <220> <223> is MANDATORY if n's or Xaa's are present
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents

10 ___ Invalid <213>
Response

Per 1.823 of Sequence Rules, the only valid <213> responses are Unknown, Artificial Sequence or scientific name (Genus/species) <220> <223> section is required when <213> response is Unknown or is Artificial Sequence

11 ___ Use of <220>

Sequence(s) ___ missing the <220> "feature" and associated numeric identifiers and responses
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol 63, No. 104, pp. 29631-32)   (See 1.823 of Sequence Rules)

12 ___ PatentIn 2.0
"bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 ___ Misuse of n/Xaa

"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC - Biotechnology Systems Branch - 09/09/2003

IFWO

RAW SEQUENCE LISTING   DATE: 02/04/2005
PATENT APPLICATION: **US/10/821,231A**   TIME: 15:27:18

Input Set : **A:\PTO.FG.txt**
Output Set: **N:\CRF4\02042005\J821231A.raw**

```
 1 <110> APPLICANT: Dongmao Zhang
 3 <120> TITLE OF INVENTION: Process and Apparatus for Segregation and Testing by
Spectral Analysis of
 4         Solid Deposits Derived From Liquid Mixtures
 6 <130> FILE REFERENCE: 12264/017
 8 <140> CURRENT APPLICATION NUMBER: 10/821231A
 9 <141> CURRENT FILING DATE: 2004-04-08
11 <150> PRIOR APPLICATION NUMBER: us 60/462083
12 <151> PRIOR FILING DATE: 2003-04-11
14 <150> PRIOR APPLICATION NUMBER: us 60/462472
15 <151> PRIOR FILING DATE: 2003-04-11
17 <150> PRIOR APPLICATION NUMBER: us 60/490057
18 <151> PRIOR FILING DATE: 2003-07-25
20 <150> PRIOR APPLICATION NUMBER: us 60/554701
21 <151> PRIOR FILING DATE: 2004-03-19
23 <150> PRIOR APPLICATION NUMBER: us 60/551311
24 <151> PRIOR FILING DATE: 2004-03-08
26 <160> NUMBER OF SEQ ID NOS: 1
28 <170> SOFTWARE: PatentIn version 3.3
```

Does Not Comply
Corrected Diskette Needed
(PS.1

ERRORED SEQUENCES

```
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 536
32 <212> TYPE: PRT
33 <213> ORGANISM: Homo sapiens
35 <400> SEQUENCE: 1
37 Met Gly Ser Asn Lys Ser Lys Pro Lys Asp Ala Ser Gln Arg Arg Arg
E--> 38 1                   5                           10
E--> 39 15
42 Ser Leu Glu Pro Ala Glu Asn Val His Gly Ala Gly Gly Gly Ala Phe
E--> 43                   20                          25
E--> 44 30
47 Pro Ala Ser Gln Thr Pro Ser Lys Pro Ala Ser Ala Asp Gly His Arg
E--> 48              35                    40                    45
51 Gly Pro Ser Ala Ala Phe Ala Pro Ala Ala Ala Glu Pro Lys Leu Phe
E--> 52         50                    55                    60
55 Gly Gly Phe Asn Ser Ser Asp Thr Val Thr Ser Pro Gln Arg Ala Gly
E--> 56 65                    70                          75
E--> 57 80
60 Pro Leu Ala Gly Gly Val Thr Thr Phe Val Ala Leu Tyr Asp Tyr Glu
E--> 61                   85                          90
E--> 62 95
```

-Pls See
item #
on
error
summary
sheet.

```
       65 Ser Arg Thr Glu Thr Asp Leu Ser Phe Lys Lys Gly Glu Arg Leu Gln
E--> 66                   100                           105
E--> 67 110
       70 Ile Val Asn Asn Thr Glu Gly Asp Trp Trp Leu Ala His Ser Leu Ser
E--> 71               115                           120                        125
       74 Thr Gly Gln Thr Gly Tyr Ile Pro Ser Asn Tyr Val Ala Pro Ser Asp
E--> 75           130                       135                       140
       78 Ser Ile Gln Ala Glu Glu Trp Tyr Phe Gly Lys Ile Thr Arg Arg Glu
E--> 79 145                       150                           155
E--> 80 160
       83 Ser Glu Arg Leu Leu Leu Asn Ala Glu Asn Pro Arg Gly Thr Phe Leu
E--> 84                           165                       170
E--> 85 175
       88 Val Arg Glu Ser Glu Thr Thr Lys Gly Ala Tyr Cys Leu Ser Val Ser
E--> 89               180                           185
E--> 90 190
       93 Asp Phe Asp Asn Ala Lys Gly Leu Asn Val Lys His Tyr Lys Ile Arg
E--> 94               195                           200                       205
E--> 97 Lys Leu Asp Ser Gly Gly Phe Tyr Ile Thr Ser Arg Thr Gln Phe Asn
E--> 98           210                       215                   220
      101 Ser Leu Gln Gln Leu Val Ala Tyr Tyr Ser Lys His Ala Asp Gly Leu
E--> 102 225                       230                       235
E--> 103 240
      106 Cys His Arg Leu Thr Thr Val Cys Pro Thr Ser Lys Pro Gln Thr Gln
E--> 107                           245                       250
E--> 108 255
      111 Gly Leu Ala Lys Asp Ala Trp Glu Ile Pro Arg Glu Ser Leu Arg Leu
E--> 112                   260                           265
E--> 113 270
      116 Glu Val Lys Leu Gly Gln Gly Cys Phe Gly Glu Val Trp Met Gly Thr
E--> 117               275                           280                       285
      120 Trp Asn Gly Thr Thr Arg Val Ala Ile Lys Thr Leu Lys Pro Gly Thr
E--> 121           290                       295                       300
      124 Met Ser Pro Glu Ala Phe Leu Gln Glu Ala Gln Val Met Lys Lys Leu
E--> 125 305                       310                           315
E--> 126 320
      129 Arg His Glu Lys Leu Val Gln Leu Tyr Ala Val Val Ser Glu Glu Pro
E--> 130                           325                       330
E--> 131 335
      134 Ile Tyr Ile Val Thr Glu Tyr Met Ser Lys Gly Ser Leu Leu Asp Phe
E--> 135                   340                           345                   350
      138 Leu Lys Gly Glu Thr Gly Lys Tyr Leu Arg Leu Pro Gln Leu Val Asp
E--> 139               355                           360                       365
      142 Met Ala Ala Gln Ile Ala Ser Gly Met Ala Tyr Val Glu Arg Met Asn
E--> 143           370                       375                       380
      146 Tyr Val His Arg Asp Leu Arg Ala Ala Asn Ile Leu Val Gly Glu Asn
E--> 147 385                       390                           395
E--> 148 400
      151 Leu Val Cys Lys Val Ala Asp Phe Gly Leu Ala Arg Leu Ile Glu Asp
```

```
RAW SEQUENCE LISTING              DATE: 02/04/2005
PATENT APPLICATION:   US/10/821,231A      TIME: 15:27:18

Input Set : A:\PTO.FG.txt
Output Set: N:\CRF4\02042005\J821231A.raw
```

```
E--> 152                        405                        410
E--> 153 415
     156 Asn Glu Tyr Thr Ala Arg Gln Gly Ala Lys Phe Pro Ile Lys Trp Thr
E--> 157                        420                        425                     430
     160 Ala Pro Glu Ala Ala Leu Tyr Gly Arg Phe Thr Ile Lys Ser Asp Val
E--> 161                436                        440                        445
     164 Trp Ser Phe Gly Ile Leu Leu Thr Glu Leu Thr Thr Lys Gly Arg Val
E--> 165        450                        455                        460
     168 Pro Tyr Pro Gly Met Val Asn Arg Glu Val Leu Asp Gln Val Glu Arg
E--> 169 465                        470                        475
E--> 170 480
     173 Gly Tyr Arg Met Pro Cys Pro Pro Glu Cys Pro Glu Ser Leu His Asp
E--> 174                        485                        490
E--> 175 495
     178 Leu Met Cys Gln Cys Trp Arg Lys Glu Pro Glu Glu Arg Pro Thr Phe
E--> 179                        500                        505
E--> 180 510
     183 Glu Tyr Leu Gln Ala Phe Leu Glu Asp Tyr Phe Thr Ser Thr Glu Pro
E--> 184                515                        520                         525
     187 Gln Tyr Gln Pro Gly Glu Asn Leu
E--> 188        530                        535
```

See item #1 on error summary sheet.

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 02/04/2005
PATENT APPLICATION: US/10/821,231A   TIME: 15:27:19

Input Set : **A:\PTO.FG.txt**
Output Set: **N:\CRF4\02042005\J821231A.raw**

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 3,38,43,48,52,56,61,66,71,75,79,84,94,98,102,107,117,121
Seq#:1; Line(s) 125,130,135,139,143,147,152,157,161,165,169,174,179,184

VERIFICATION SUMMARY   DATE: 02/04/2005
PATENT APPLICATION: **US/10/821,231A**   TIME: 15:27:19

Input Set : **A:\PTO.FG.txt**
Output Set: **N:\CRF4\02042005\J821231A.raw**

L:38 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1
M:332 Repeated in SeqNo=1
L:97 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1